

THE ELECTRIC LIGHT ILLUMINATION

UPON THE SYSTEMS KNOWN AS

GRAMME, WESTON, MAXIM, NICHOLS, ETC.

Under Proprietary Rights, for the Dominion of Canada, of the

CANADIAN ELECTRIC LIGHT COMPANY,

No. 17 PLACE D'AMES, Montréal.

The *Canadian Electric Light Company* has acquired the latest and the most complete patent rights bearing upon the subject of illumination by electricity. These proprietary rights extend even to discoveries that may be made in the future, and which shall come under the control of the great Electric Light Company of the United States, doing business in New-York, and which has a vast amount of capital at its disposal.

The production of electricity has now become simply an industrial problem; it is more easily controlled and regulated than steam. Thanks to the new machines, it is no longer dependent upon the glass friction-wheel, the zinc-and-copper battery, or the Voltaic pile seen in laboratories. A simple iron drum with a copper wire coil, turning cylinder-like between (but without touching) two magnets, which are also covered with coils of copper wire—such is the complete mechanism. There is no friction even; it is simply a matter of vibration; and if this drum be made to vibrate during the whole year, it will produce electricity all the year round without the least interruption. No ingredient enters into the production of the mysterious current, which, from this very cause, is inexhaustible and unlimited. To set the machine going, all that is required is a motive power.

The above is a brief explanation in popular language of the generator known as the dynamo-electric machine, which is capable of producing currents of the greatest power; in fact, so intense is the current produced by one of these machines above, when driven by a steam-engine of fifty horse power, that it will give a light equal in brilliancy to a hundred thousand candles.

Under conditions such as these, it may be said without fear of contradiction that electricity has now entered into the field of industry, since the production of the current is, henceforth, dependent upon a mere mechanical effect. The instrument, once adjusted, requires no attention; and any mechanic of ordinary intelligence may draw at will light or

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